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10/645,279	08/20/2003	Keith Ballinger	13768.455	7258
22913 WORKMAN N	7590 05/11/200 <sup>r</sup> IYDEGGER	EXAMINER		
(F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111			PATEL, CHANDRAHAS B	
			ART UNIT	PAPER NUMBER
			2616	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)	
	10/645,279	BALLINGER ET AL.	
Office Action Summary	Examiner	Art Unit	
	Chandrahas Patel	2616	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period way reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirn rill apply and will expire SIX (6) MONTHS from cause the application to become AB ANDONE!	I.  lety filed  the mailing date of this communication.  O (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 20 Au	ugust 2003.		
,—	action is non-final.		
3) Since this application is in condition for allowar closed in accordance with the practice under E			
Disposition of Claims			
4) ☐ Claim(s) 1-27 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-27 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.		
Application Papers			
9)⊠ The specification is objected to by the Examine 10)⊠ The drawing(s) filed on 20 August 2003 is/are:  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)□ The oath or declaration is objected to by the Ex	a)⊠ accepted or b)□ objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is objected.	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage	,
Attachment(s)			
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	4) Interview Summary Paper No(s)/Mail Do		

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date 8/20/2003.

5) Notice of Informal Patent Application

6) Other: \_

#### **DETAILED ACTION**

### Specification

1. The disclosure is objected to because of the following informalities:

On Page 10, Paragraph 24 applicant refers to content by numeral 110 and to computer system by numeral 110.

Locally is spelled incorrectly on Page 10, Paragraph 25.

On Page 17, Paragraph 41 applicant refers to Router C by numeral 230, while in Fig. 2 Router C is referenced by numeral 240.

On Page 18, Paragraph 43 applicant refers to message by numeral 240, while in Fig. 2 numeral 240 refers to Router C. The appropriate message numeral in specification should be 204.

Appropriate correction is required.

### Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, acronym SOAP is not spelled out in the claim. This renders the claim indefinite since SOAP is not a well-known acronym used in communication art.

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# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1, 3, 8-11, 16, 18, 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuchiya (USPN 5,353,283).

Regarding claim 1, Tsuchiya teaches in a router, a method of routing a message from a sending computer system to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system [Col. 6, lines 31-34], comprising the following: an act of receiving a message that originated at the sending computer system and that is to be delivered to the receiving computer system [Col. 6, lines 42-43, node x transmits to next node therefore "next node" is receiving the message], the message having at least a router list that identifies one or more routers [Fig. 8, 410, 420, 430, 440, 450, 460, 470, 480], an ultimate destination identifier [Fig. 8, 485, this field points to the right field indicating the destination], and message content [Fig. 6, PAYLOAD]; an act of accessing routing rules that specify how the message should be routed to the receiving computer system [Col. 6, lines 43-47]; an act of comparing at least a portion of the message to the routing rules to determine whether the router list should be reconfigured wherein the router adds or deletes one or more router in the router list as appropriate [Col. 7, lines 16-60, depending on header its determined if packet is in the backbone of the network it belongs and pointer to routing table is changed which will change the sequence of nodes accessed which will add

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or delete routers from the list, Col. 8, lines 10-15 state adding a router]; and an act of sending the message to a next router in the router list [Col. 7, lines 62-68 - Col. 8, lines 2-5], wherein the next router identifies that it is an appropriate recipient for the message [Col. 8, lines 58-63, extra information is used to verify that packet is at right node].

Regarding claims 3 and 18, Tsuchiya teaches the routing rules are present in one or more of the router [Fig. 14, node x's routing table], the next router [Fig. 15, node b's routing table], the sending computer system [node x is sending computer system whose routing table is shown in Fig. 14, Col. 6, lines 9-10], and the message [Fig. 8, 410, 420, 430, 440, 450, 460, 470, 480 describe a sequence of nodes that should be accessed].

Regarding claims 8 and 23, Tsuchiya teaches an act of providing a router preference in the router list prior to relaying the message to the router [Col. 8, lines 30-35].

Regarding claims 9 and 24, Tsuchiya teaches the router is a user-created router, the user-created router determining whether to add or a delete a next router from the router list based on the content in the message [Col. 10, lines 3-21, depending on the value of RC field the router will be changed which will add or delete routers as appropriate for the routel.

Regarding claims 10 and 25, Tsuchiya teaches reconfiguring the router list contained within the message based at least on one or more of a router identified in the routing list, the geographic origin of the message [Col. 9, lines 18-33], and the message content [Col. 10, lines 3-21].

Regarding claims 11 and 26, Tsuchiya teaches comparing at least a portion of the message to the routing rules comprises an act of comparing the message content to the routing rules [Col. 7, lines 16-30].

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Regarding claim 16, Tsuchiya teaches a computer program product for use in a router, the computer program product for implementing a method for routing a message from a sending computer system to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system [Col. 6, lines 31-34], the computer program product comprising one or more computer-readable media having stored thereon computer executable instructions that, when executed by a processor, cause the router to perform the following [Fig. 2, 11, Col. 1, lines 51-54]: receive a message that originated at the sending computer system and that is to be delivered to the receiving computer system [Col. 6, lines 42-43, node x transmits to next node therefore "next node" is receiving the message], the message having at least a router list that identifies one or more routers [Fig. 8, 410, 420, 430, 440, 450, 460, 470, 480], an ultimate destination identifier [Fig. 8, 485, this field points to the right field indicating the destination], and message content [Fig. 6, PAYLOAD]; access routing rules that specify how the message should be routed to the receiving computer system [Col. 6, lines 43-47]; compare at least a portion of the message to the routing rules to determine whether the router list should be reconfigured wherein the router adds or deletes one or more router in the router list as appropriate [Col. 7, lines 16-60, depending on header its determined if packet is in the backbone of the network it belongs and pointer to routing table is changed which will change the sequence of nodes accessed which will add or delete routers from the list, Col. 8, lines 10-15 state adding a router]; send the message to a next router in the router list [Col. 7, lines 62-68 - Col. 8, lines 2-5], wherein the next router identifies that it is an appropriate recipient for the message [Col. 8, lines 58-63, extra information is used to verify that packet is at right node].

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# Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 2, 6, 7, 17, 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya (USPN 5,353,283) in view of Burbeck et al. (USPN 7,181,536, Herein as Burbeck).

Regarding claims 2 and 17, Tsuchiya teaches a method and a computer program product as discussed in rejection of claim 1 and 16.

However, Tsuchiya does not teach receiving a SOAP message.

Burbeck teaches receiving a SOAP message [Col. 9, lines 4-8].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to receive a SOAP message so that messaging can be provided [Col. 8, lines 20-21].

Regarding claims 6 and 21, Tsuchiya further teaches an act of detecting that the ultimate destination is an appropriate recipient of the message upon receiving the message at the ultimate destination [Col. 2, lines 40-45].

Regarding claims 7 and 22, Tsuchiya further teaches an act of identifying the one or more routers in the router list sequentially beginning with a top most router [Col. 5, lines 28-32]; an act of identifying at the router that the router is a top most router in the router list [Col. 6, lines 53-58]; an act of removing the top most router in the router list upon sending the message so that a subsequent router becomes the top most router in the router list [Col. 7, lines 16-23, 460 is now the top most router since the packet is transmitted]; and an act of confirming at the

ultimate destination that the ultimate destination is the top most router in the router list [Col. 7, lines 46-61].

8. Claims 4, 12-15, 19, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya (USPN 5,353,283) in view of Waclawsky et al. (USPN 5,493,689, Herein as Waclawsky).

Regarding claims 4 and 19, Tsuchiya teaches a method as discussed and a computer program product in rejection of claim 1 and 16.

However, Tsuchiya does not teach reconfiguring the router list based on a local file stored in the next router.

Waclawsky teaches reconfiguring the router list based on a local file stored in the next router [Col. 7, lines 17-24, Routing Expert 106 is a file stored in memory 100 as shown in Fig 1A].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reconfigure the router list based on local file stored in the router so that router list can be changed depending on type of packets [Col. 7, lines 5-14].

Regarding claim 12, Tsuchiya teaches in a router, a method of routing a message from a sending computer system to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system [Col. 6, lines 31-34], comprising the following: an act of receiving a message that originated at the sending computer system and that is to be delivered to the receiving computer system [Col. 6, lines 42-43, node x transmits to next node therefore "next node" is receiving the message, the

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message having at least a router list that identifies one or more routers [Fig. 8, 410, 420, 430, 440, 450, 460, 470, 480], an ultimate destination identifier [Fig. 8, 485, this field points to the right field indicating the destination], and message content [Fig. 6, PAYLOAD]; a step for adjusting a routing path for the message based in part on the ultimate destination indicated in the message [Col. 6, lines 9-20], the routing list included in the message [Col. 6, lines 20-25]; and an act of sending the message to a next router in the router list [Col. 7, lines 62-68 — Col. 8, lines 1-5], wherein the next router identifies that it is an appropriate recipient for the message [Col. 8, lines 58-63, extra information is used to verify that packet is at right node].

However, Tsuchiya does not teach adjusting a routing path based on a referral cache.

Waclawsky teaches adjusting a routing path based on a referral cache [Col. 7, lines 17-24, Routing expert is stored in memory as shown in Fig. 1B, 106].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust a routing path based on a referral cache so that the router list can be changed depending on type of packets [Col. 7, lines 5-14].

Regarding claim 13, Tsuchiya further teaches a corresponding act of accessing routing rules that specify how the message should be routed to the receiving computer system [Col. 6, lines 43-47]; and a corresponding act of comparing at least a portion of the message to the routing rules to determine whether the router list should be reconfigured, wherein the router adds or deletes one or more routers in the router list as appropriate [Col. 7, lines 16-60, depending on header its determined if packet is in the backbone of the network it belongs and pointer to routing table is changed which will change the sequence of nodes accessed which will add or delete routers from the list, Col. 8, lines 10-15 state adding a router].

Regarding claim 14, Tsuchiya teaches in a sending computer system, a method of routing a message to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system [Col. 6, lines 31-34], comprising the following: an act of identifying the receiving computer system [Fig. 8, 480], and one or more preferred routers by which the message is intended to be relayed to the receiving computer system [Col. 6, lines 14-20]; an act of creating the message, the message including an identifier representing the receiving computer system [Fig. 8, 480], message content [Fig. 6, PAYLOAD], and a message router list [Fig. 8, 410, 420, 430, 440, 450, 460, 470, 480], the message router list including the one or more preferred routers [Col. 6, lines 14-20]; an act of referencing a cached router list stored at the sending computer system [Col. 6, lines 42-47]; and an act of sending the message to a first router included in the modified router list [Col. 6, lines 53-58].

However, Tsuchiya does not teach an act of modifying the message router list based on router data contained within the cached router list, wherein a router from the cached router list is added to the message router list or a router is a deleted from the message router list.

Waclawsky teaches an act of modifying the message router list based on router data contained within the cached router list, wherein a router from the cached router list is added to the message router list or a router is a deleted from the message router list [Col. 7, lines 17-24, Routing expert is stored in memory as shown in Fig. 1B, 106].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the router list so that the router list can be changed depending on type of packets [Col. 7, lines 5-14].

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Regarding claim 15, Tsuchiya further teaches an act of modifying the message router list based on routing rules that indicate one or more preferred routers through which the message should be relayed before reaching the receiving computer [Col. 8, lines 30-35].

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Regarding claim 27, Tsuchiya teaches a computer program product for use in a sending computer system, the computer program product for a method for routing a message from a sending computer system to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system [Col. 6, lines 31-34], the computer program product comprising one or more computer-readable media having stored thereon computer executable instructions that, when executed by a processor, cause the sending computer system to perform the following [Fig. 2, 11, Col. 1, lines 51-54]: identify the receiving computer system [Fig. 8, 480], and one or more preferred routers by which the message is intended to be relayed to the receiving computer system [Col. 6, lines 14-20]; create the message, the message including an identifier representing the receiving computer system [Fig. 8, 480], message content [Fig. 6, PAYLOAD], and a message router list [Fig. 8, 410, 420, 430, 440, 450, 460, 470, 480], the message router list including the one or more preferred routers [Col. 6, lines 14-20]; reference a cached router list stored at the sending computer system [Col. 6, lines 42-47]; and send the message to a first router included in the modified router list [Col. 6, lines 53-58].

However, Tsuchiya does not teach modifying the message router list based on router data contained within the cached router list, wherein a router from the cached router list is added to the message router list or a router is a deleted from the message router list.

Waclawsky teaches modifying the message router list based on router data contained within the cached router list, wherein a router from the cached router list is added to the message router list or a router is a deleted from the message router list [Col. 7, lines 17-24, Routing expert is stored in memory as shown in Fig. 1B, 106].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the router list so that the router list can be changed depending on type of packets [Col. 7, lines 5-14].

9. Claims 5 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya (USPN 5,353,283) in view of Burbeck et al. (USPN 7,181,536, Herein as Burbeck) as applied to claim 2 above, and further in view of Owen et al. (USPN 6,950,438, Herein as Owen).

Regarding claims 5 and 20, the references teach a method and a computer program product as discussed in rejection of claim 2 and 17.

However, the references do not teach the next router identifies that it is an appropriate target of the sent message based on one or more of the next router's position in the router list, and a router designation contained in the message.

Owen teaches the next router identifies that it is an appropriate target of the sent message based on one or more of the next router's position in the router list, and a router designation contained in the message [Col. 22, lines 43-56].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have next router identify that it is an appropriate recipient of the message based on

router's position in the router list so that if the packet is not at its target node it can be forwarded to the appropriate destination node [Col. 22, lines 49-53].

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is 571-270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**CBP** 

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